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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,590	01/20/2004	Christopher T. Boyer	224795	1107
23460	7590	07/10/2007	EXAMINER	
LEYDIG VOIT & MAYER, LTD			CHIN, RANDALL E	
TWO PRUDENTIAL PLAZA, SUITE 4900			ART UNIT	PAPER NUMBER
180 NORTH STETSON AVENUE			1744	
CHICAGO, IL 60601-6731			MAIL DATE	DELIVERY MODE
			07/10/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/760,590	BOYER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Randall Chin	1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) 1-27 is/are rejected.
- 7) Claim(s) \_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 21 May 2007 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. ____ .
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>05122004; 03092005</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application
	6) <input type="checkbox"/> Other: ____ .

## DETAILED ACTION

### ***Election/Restrictions***

1. Applicant's election with traverse of the species of Figs. 1-11, claims 1-27, in the reply filed on 21 May 2007 is acknowledged. The traversal is on the ground(s) that it would not be a serious burden on the Office if restriction were not required. Furthermore, the Office Action does not set forth reasons why restriction is necessary, as required by MPEP §§ 803 and 808. Therefore, Applicants respectfully request the reconsideration and withdrawal of the restriction requirement. In addition, at least independent claim 1 is generic.

This is not found persuasive because the species of Figs. 1-11 and Figs. 12-13 are independent or distinct because these species are not obvious variants of each other based on the current record. There is an examination and search burden for these patentably distinct species due to their mutually exclusive characteristics. The species require a different field of search (e.g., searching different classes/subclasses or electronic resources, or employing different search queries); **and/or** the prior art applicable to one species would not likely be applicable to another species; **and/or** the species are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph. Further, Applicant has not traversed on grounds that the species are not patentably distinct.

Upon the allowance of a generic claim, Applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141.

The requirement is still deemed proper and is therefore made FINAL.

***Specification***

2. The disclosure is objected to because of the following informalities:

On p. 6, line 7, it is suggested to insert the term –front-- after “pusher”.

On p. 6, line 8, “rear cam 112” should read –rear cam 110--.

On p. 6, line 13, “rear cam 112” should read –rear cam 110--.

On p. 9, line 6, it is suggested to change “front portion 192” to –distal portion 192- for clarity (see p. 6, line 2, for example).

On p. 9, line 29, change “engaging surface 194” to –cam-engaging surface 144-- for clarity.

On p. 9, line 34, it appears “260, 262, 264, 268” should read –262, 264, 266, 268-- instead.

On p. 10, lines 2-3, it appears “260, 262, 264, 268” should read –262, 264, 266, 268-- instead.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-7, 9, 11-16, 19, 20, 23, 26 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Viner 6,418,585 (hereinafter Viner).

The patent to Viner discloses in Figs. 1-3 a mop 10 for use in mopping floors comprising a handle 12, the handle has a distal end and a proximal end, the handle extends along a longitudinal axis, a slidable tubular section or pusher 14, the pusher is slideably connected to the handle (col. 3, lines 64-65), the pusher is able to slideably move toward the distal end of the handle, the pusher is able to slideably move toward the proximal end of the handle, the pusher has a distal end and a proximal end, a plate or mop element support 26, the mop element support has an upper surface and a lower surface, the upper surface of the mop element support is connected to the distal end of the handle (Figs. 2 and 3), the mop element support has a first hinge line 36 (Fig. 2A), the mop element support is able to fold along the first hinge line 36, the first hinge line 36 is along a transverse axis, the transverse axis is perpendicular to the longitudinal axis, and a mop element 48, the mop element 48 is adjacent to the lower surface of the mop element support 26, the mop element 48 is able to fold along the first hinge line (Figs. 4 and 5).

As for claim 2, the distal end of the pusher 14 has two arms 20, 20a.

As for claim 3, the arms 20, 20a engage the mop element support when the pusher is moved toward the distal end of the handle (Fig. 3).

As for claim 4, each arm 20, 20a has a cam engaging surface 20', 20a'.

As for claim 5, the mop element support has a front groove or cam 44a or 44b and a rear groove or cam 46a or 46b (Fig. 2A).

As for claim 6, the front cam and the rear cam, as mentioned for claim 5 above, are attached to the mop element support (Fig. 2A).

As for claim 7 (which depends on claim 5, which claim 5 ultimately depends on claim 1), in a broad sense, the front cam can be considered the arm or finger 20 or 20a which is deemed to have 3a central portion, a distal portion and a stop portion.

As for claim 9, and for similar reasons explained for claim 7 above, the rear cam can be considered the other arm or finger 20, 20a which is deemed to have a center portion, a lower arm and an upper arm.

As for claim 11, the stop portion engages the pusher to limit the movement of the pusher toward the proximal end.

As for claim 12, the mop element support has a second hinge line 36a (Fig. 2A).

As for claim 13, the second hinge line 36a is substantially parallel to the first hinge line 36 (Fig. 2A).

As for claim 14, the mop element support has a first portion and a second portion, the first portion is connected to the second portion along the first hinge line 36 (Fig. 2A).

As for claim 15, the mop element support has a third portion, the third portion is connected to the first portion along a second hinge line 36a (Fig. 2A).

As for claim 16, the mop element support 26 includes a fluid opening 56 (col. 5, lines 1-5).

As for claim 19, if so desired, the mop element 48 can be removed from the mop element support.

As for claim 20, the mop element 48 includes a sponge (col. 4, lines 37-39).

As for claim 23, the pusher 14 includes a grip portion (i.e., the top portion) and a yoke portion (i.e., the bottom portion) (Fig. 1).

As for claim 26, the lower end of the handle at 12a defines a "boss" on the distal end of the handle (Fig. 2)

As for claim 27, the "boss" at 12a is connected to the mop element support 26.

#### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Viner in view of Zottola 2,916,754 (hereinafter Zottola).

The patent to Viner discloses all of the recited subject matter as set forth above with the exception of the mop element support including an attachment portion for a scrub brush as well as a scrub brush itself. The patent to Zottola discloses a mop element plate or support 60 including an attachment portion for a scrub brush and a scrub brush 22 (Figs. 1 and 2). It would have been obvious to one of ordinary skill in the

art to have provided Viner's mop element support with an attachment portion for a scrub brush as well as a scrub brush as taught by Zottola for adding versatility to the mop device by adding a scrubbing element. Such a combination of a wringer sponge mop and scrub brush is old and well known in the art.

7. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Viner in view of France 2 709 056 (hereinafter France '056).

The patent to Viner discloses all of the recited subject matter as set forth above with the exception of the mop element including a sponge holder, the sponge holder attaching to the mop element support. France '056 teaches in Fig. 4, for example, a mop element 3 including a sponge holder 10, the sponge holder 10 attaching to the mop element support at 2, 13, 15. It would have been obvious to one of ordinary skill in the art to have provided Viner's mop element with a sponge holder, the sponge holder attaching to the mop element support as taught by France '056 for the purpose of securely attaching the mop element to the mop itself. It is the Examiner's position that whether one utilizes a sponge holder to attach a mop element to the mop element support or simply uses adhesive to do the same, either arrangement is deemed obvious in view of the other and are deemed mere mechanical equivalents for attaching the mop element to the mop element support.

8. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Viner in view of Davis 3,484,888 (hereinafter Davis).

The patent to Viner discloses all of the recited subject matter as set forth above with the exception of the mop element including a scrubber strip. The patent to Davis discloses a mop element 26 including a scouring or scrubber strip 34 (Figs. 1 and 2). It would have been obvious to one of ordinary skill in the art to have provided Viner's mop element with a scrubber strip as taught by Davis for adding versatility to the mop by adding a scrubbing element thereto.

9. Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Viner.

As for claim 24 reciting that a grip portion is removable from a yoke portion, it would have been obvious to one of ordinary skill in the art to have modified Viner's pusher such that it is two pieces instead of one as a mere choice in mechanical design to enable quick disassembly of the mop device.

As for claim 25 reciting that the grip portion includes an overmolded material, it would have been obvious to one of ordinary skill in the art to have made the pusher of a rubber sleeve to facilitate handling of the grip portion.

10. Claims 1-13, 19, 20, 23, 26 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Vaughn 2,730,744 (hereinafter Vaughn).

The patent to Vaughn discloses in Fig. 1 a mop for use in mopping floors comprising a handle 20, the handle has a distal end and a proximal end, the handle extends along a longitudinal axis, a slidable handle or pusher 46, the pusher is slideably

connected to the handle, the pusher is able to slideably move toward the distal end of the handle, the pusher is able to slideably move toward the proximal end of the handle, the pusher has a distal end and a proximal end, a mop element support 28, 28, the mop element support has an upper surface and a lower surface, the upper surface of the mop element support is connected to the distal end of the handle, the mop element support has a first hinge line (i.e., along pin 30), the mop element support is able to fold along the first hinge line, the first hinge line is along a transverse axis, the transverse axis is perpendicular to the longitudinal axis, and a mop element 37, the mop element 37 is adjacent to the lower surface of the mop element support, the mop element is able to fold along the first hinge line.

As for claim 2, the distal end of the pusher 14 has two arms 49, 49.

As for claim 3, the arms 49, 49 engage the mop element support when the pusher is moved toward the distal end of the handle.

As for claim 4, each arm 49, 49 has a cam engaging surface (Figs. 1-4).

As for claim 5, the mop element support has a front cam 34 and a rear cam 34.

As for claim 6, the front cam and the rear cam, as mentioned for claim 5 above, are attached to the mop element support.

As for claim 7 the front cam 34 has a central portion, a distal portion and a stop portion.

As for claim 8, the stop portion 31 is at an angle of approximately 90° to the central portion and the distal portion is at an angle of approximately 130° (i.e., at sloped portion of cam 34 in Fig. 4) to the central portion (Figs. 3 and 4).

As for claim 9, and for similar reasons explained for claim 7 above, the rear cam 34 has a center portion, a lower arm and an upper arm.

As for claim 10, the lower arm is at an angle of approximately 90° to the center portion and the upper arm as at an angle of approximately 90° to the center portion (Figs. 3 and 4).

As for claim 11, the stop portion engages the pusher to limit the movement of the pusher toward the proximal end.

As for claim 12, the mop element support has a second hinge line (along pivot pin 30).

As for claim 13, the second hinge line is substantially parallel to the first hinge line.

As for claim 19, if so desired, the mop element 37 can be removed from the mop element support.

As for claim 20, the mop element 37 includes a sponge (col. 2, lines 71-72).

As for claim 23, the pusher 46 includes a grip portion (i.e., the top portion) and a yoke portion at 48 (Fig. 1).

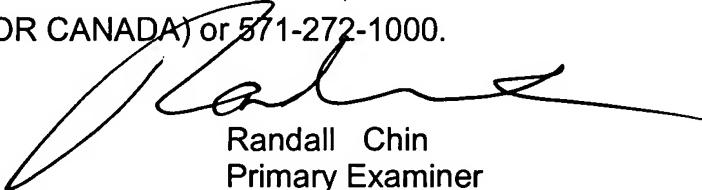
As for claim 26, the lower end of the handle at 12a defines a "boss" on the distal end of the handle at 21.

As for claim 27, the "boss" at 21 is connected to the mop element support 28, 28 (Fig. 1).

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randall Chin whose telephone number is (571) 272-1270. The examiner can normally be reached on Monday through Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Randall Chin  
Primary Examiner  
Art Unit 1744



## REPLACEMENT SHEET

FIG. 3

